STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information
Center (STIC) detected errors when processing the following computer readable
form:

Application Serial Number: _10/562,383_

Source: _IFWP_

Date Processed by STIC: _1/9/06_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE
APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A
NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER
VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
> http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is
a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the
United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission
User Manual - ePAVE)**
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):**
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: *10/562,383*

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1____Wrapped Nucleics   The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
       Wrapped Aminos   was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will
                         prevent "wrapping."

2____Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.

3____Misaligned Amino   The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers;
       Numbering   use space characters, instead.

4____Non-ASCII   The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please
                         ensure your subsequent submission is saved in ASCII text.

5____Variable Length   Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules,
                         each n or Xaa can only represent a single residue. Please present the maximum number of each
                         residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____PatentIn 2.0   A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
       "bug"   sequences(s) _____. Normally, PatentIn would automatically generate this section from the
                         previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
                         the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for
                         Artificial or Unknown sequences.

7____Skipped Sequences   Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
       (OLD RULES)   (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
                         (i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
                         (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
                         This sequence is intentionally skipped

                         Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8____Skipped Sequences   Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
       (NEW RULES)   <210> sequence id number
                         <400> sequence id number
                         000

9____Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
       (NEW RULES)   Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
                         In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10____Invalid <213>   Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or
       Response   scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or
                         is Artificial Sequence

11____Use of <220>   Sequence(s)_____missing the <220> "Feature" and associated numeric identifiers and responses.
                         Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or
        ___)   "Unknown." Please explain source of genetic material in <220> to <223> section.
                         (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12____PatentIn 2.0   Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
       "bug"   resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
                         listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13____ Misuse of n/Xaa   "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC – Biotechnology Systems Branch – 09/09/2003

IFWP

RAW SEQUENCE LISTING   DATE: 01/09/2006
PATENT APPLICATION: US/10/562,383   TIME: 11:39:50

Input Set : N:\DA\PTO.DA.txt
Output Set: N:\CRF4\01092006\J562383.raw

```
        3 <110> APPLICANT: Lofton-Day, Cathy; Model, Fabian; Sledziewski, Andrew;
Rujan, Tamas;
        4       Lewin, Joern; Distler, Juergen
        6 <120> TITLE OF INVENTION: Methods and nucleic acids for the analysis of
colon cell
        7       proliferative disorders
W-->    0 <130> FILE REFERENCE:
C-->    9 <140> CURRENT APPLICATION NUMBER: US/10/562,383
C-->   10 <141> CURRENT FILING DATE: 2005-12-23
       12 <150> PRIOR APPLICATION NUMBER: PCT/US04/20336
       13 <151> PRIOR FILING DATE: 2004-06-23
       15 <150> PRIOR APPLICATION NUMBER: US 10/679,062
       16 <151> PRIOR FILING DATE: 2003-10-03
       18 <150> PRIOR APPLICATION NUMBER: US 10/603,138
       19 <151> PRIOR FILING DATE: 2003-06-23
       21 <150> PRIOR APPLICATION NUMBER: US 10/602,494
       22 <151> PRIOR FILING DATE: 2003-06-23
       24 <150> PRIOR APPLICATION NUMBER: EP 04090175.3
       25 <151> PRIOR FILING DATE: 2004-05-06
       27 <150> PRIOR APPLICATION NUMBER: EP 04090072.2
       28 <151> PRIOR FILING DATE: 2004-02-27
       30 <160> NUMBER OF SEQ ID NOS: 14624
       32 <210> SEQ ID NO: 1
       33 <211> LENGTH: 2280
       34 <212> TYPE: DNA
       35 <213> ORGANISM: Homo Sapiens
       37 <400> SEQUENCE: 1
       39 accagcacag aattgctacc ataggatcgc agcctaagca ctagagtgac attaattggt      60
       40 catgcttaac tgcctcaaaa tcattttta aataattaca ctgatactat aatagaaatc      120
       41 atgggtactt attttacatt cagatggaag gcattattgg atatgtatta aaaaaaagac      180
       42 cccctgaaaa aaataaaata aaataaaaca tcaccatcaa aataaaagaa cccaaaacaa      240
       43 cccctaaaaa cttccctcaa caaaatacat tgttaactca taaaatggac tgatgactag      300
       44 ccatgcaaat gtcctaaata aaacctttac attttttca cagttaactt atgctctgaa      360
       45 ctgcctaccg atcacaaata atggcgaaat ggcactttct gattatactg tattttgttt      420
       46 atagaaagtt tgatacgatg gaacttatca ggtaagaggg tgggtgctgt gaacgagatg      480
       47 ccgtctccag tcgcgggggc gggcagagtc cctggagcgc gtggattcca tgcgagccat      540
       48 gcagcacttt ttgttttttg tcagaagtca aagttactta tttacaatac attcatgcct      600
       49 tcgtgcaact gcccatccct gcgtagccaa cagggagcca tcacgggct aatccacagg       660
       50 ggaaaaatag atatctatct ctctatatag atgtggatat atgtatatat gtatagaacc      720
       51 gcggcatcca accccacagg ccccggggcc gagggcgagg gcactgtcag ttcttccagc      780
       52 agggtcgtgc tgggctttct gtcaaaaggg gctctcagca aagagcgagc tggctgcgct      840
       53 ctcccagctc tccacagtct gctctttgtt tcaaggaggg agctaagtaa ggggtcaggc      900
       54 cctttcggtt gtgcgagctc acagttattt atctacttat gcccatccag gctgatggcg      960
       55 cggggatttg ggtacacgcc cctccagccc ccggggtgcc tgcggtgggg aaggatgtat     1020
```

56 cgccttccct ctgccctccc ctattggggt tggggtctta gtctgagagc gagtgagagc   1080

RAW SEQUENCE LISTING   DATE: 01/09/2006
PATENT APPLICATION: US/10/562,383   TIME: 11:39:50

Input Set : N:\DA\PTO.DA.txt
Output Set: N:\CRF4\01092006\J562383.raw

```
57 cacagtcata cactctgtgg gccccatctg cgttgtaagg cccattgtgc cagtaggaag      1140
58 agtcacagac tgtctgtagg gaattaatct cggacgcgga ggagttggca tctcgtctct      1200
59 tggaccgctt tcggttcctc aggataaaca cgagcatgcc caccacggtg aaggcggagg      1260
60 tgacaaacac cagcagcagt cccgggacca acaccgagat ggacaccctg ctggtgtcta      1320
61 ggtaggagtt ggagtgcgtc ccggtctccg ccaacccagt gctgtttta ctgtgcgaag       1380
62 ttaacgtggg cgagatccta gcgtacagct gagggcagat ctcgtcattg gagaggagca      1440
63 tgaaatcctt tctaaagaag ttcaccggcg tctcacactt gaggtcgctc atcagcactt      1500
64 cggaacccaa gcgttctgcc cactgcttga aaggcacaat tgtgcaggag cactcccagg      1560
65 ggtttccgtg gaggtctatc tggatgatgg aggttaactg gtccagcacc cctgccaccg      1620
66 ggaggtacat gaagtaattg ttgtgcaggc tgagtttaga gagcgagacc ccagcgaaca      1680
67 cgtccacagg cagggacctc agcaggttgt tgttgagaat gaggatcctc agtttgggca      1740
68 tggcattgaa agtgcccggg aggatgagct ggatagcgtt gtactccacg ttcaggtact      1800
69 ctaggttttg cagccccgcg aatttctccc gggacagcgt gtccaggtaa ttgctatcca      1860
70 tgtatagcca cctgaggtcc aaaaggttct tgaaagtgtt gttctctaca gtagcgatgt      1920
71 tattgttgcc cagatccaac agaatgaggt tcttgtaatc cacaaagtgc gattttcgga      1980
72 tgctgtggat cttgttatct cgtaggaaaa gctcctgcac gttagagagc ttgggcttca      2040
73 aatcagccaa gctgctcacg ttcctgttgt tgcagttcat ctttaaaccc gaccctggga      2100
74 tgtggtcgca gctgcagccc ccagggcagg gtaaactgtt agctaagggt ttgttcctgg      2160
75 agctacccgt cgctatcgct gctgtgggtc tgattttgat ctgccagttg cctgggatct      2220
76 ttgtacctcc gtttggagca gaccctggtg tggcatgatc ctcttgccca tttgtcttga      2280
78 <210> SEQ ID NO: 2
79 <211> LENGTH: 2477
80 <212> TYPE: DNA
81 <213> ORGANISM: Homo Sapiens
83 <400> SEQUENCE: 2
85 tggcacagac atggcccta aagccaaaaa ccatgatgga gtgaaggaca gctgtgctca         60
86 gacctgcgtc ctgtcctctg gaggctgctg tggttctggg gatgagtcgg aggtgggcag       120
87 gcagcggtct ccggggcctg cagcagggag gccaccacct gcacagcaga acacagcacc       180
88 attccacagg gagcatcccg gggcgggcag caactctgga ggcacccccg ggaaggagcc       240
89 aggcatgggg gaggcggagg cgaccccaga agcagaggag ccgctgggga gccacggcct       300
90 tctgggtgtg gagctgtgga ggatgagtgc caccctccc ttccgggcct tctactctgt        360
91 agggatccct acgtccagga ccattgatt gtcaaggtct cggcaccctc gtcaggtcag        420
92 ctgggggcca aggccctaa ctccgaggac tggggccgcc aacatgggca gcagcacagg         480
93 aggccgagag gaggtccaca agggctgcac ttccttcctg gctgcagtcc accccccaga       540
94 gcagggcggg cgtggagcca ctctcaccag tattgttggc cttgagggcc tggtgggcag       600
95 tgccgcctgg tgtgggggac agctcctgag caggctgccg cattcctggc actctggtct       660
96 ccctgggatt ctcaggtggc ccacgctcgg cagtgctcgc cttctgggct ctcagggctc       720
97 gtttctgttg cagctcctgc agtgggagca tcgctgagca ctgtccctgg gagaggacga       780
98 ccccaggctc cacagccaag ctgccctgag gctaagtgtc ccggggccca gggagcccca       840
99 gcagcagccc cgcacggtca ggcctgggcc acggtgctgc tcagtggtcc ctgcgcggtc       900
100 agcacctgaa tggctgctcg cctggcttgg cgtgccttct cctcccgggc cttcctcctg      960
101 gctgcctctt tctgctggtg caggtccaag agggtcccct cgcctgaccg ctgccgctgc      1020
102 tcctgccaaa gaagccggtg ccatgtggcg tttacatctg gaagacgaaa tccagaccca      1080
103 gaccagaggt ttccccacaa cgccctggag tccctagag ttcgtggaat ctcagggcca       1140
104 gcagggaaag tgaaaccca ccaggacctt gaacctgcca tttctctgct ctacagagga       1200
105 tgagccctac gtcgcaggtg gccaacagtt ctggcgtggg ggagacagct ctgcccccac      1260
106 agaacgtcct cctgagactc tccagcctgg gatggaccca gcaggcgttt cctgacaccc      1320
107 aggccctgag gaccgccagt gaggaccacc ctgactgtcc gcggggaccc agggtcaaga      1380
108 aggatgctgc acccagagac ggggcccacg agcaatccta ggctttgatt ccacctgtcc      1440
```

```
109 cagaaactca aaccccctggg attctgggcc agacccccg ggggagcatg gagtgactga   1500
110 gacgcccaca ctgacctccc gcttggcctg aagcaagtgc tccaggcggg cagctcctgc   1560
111 tccgcgccgc tgcacctggt gccggtacca gcgctggatg gtgacagtgg cctggttcac   1620
112 ctggtggata aacctgcccg gagagcagga ctcagggcca agacaggacc agcgccccgg   1680
113 caggacccag ctggctgctg gtggaaggtc gagccgggga agagagaagc cggcggctgc   1740
114 actcaagtag ccctttcac aaggcaggac cagcccacct ggaccatttt cacatggcag    1800
115 gaccagccgc ctggaccagc tccactaaaa cccaaaacct tcttcctggg aaggtgccca   1860
116 ggggagagga aacgcctacc cacgcaggcc tgtgtggcct tatttacaat tgccaggaag   1920
117 tgggaagagt tcaaatgccc atgacctggc tacagcgtga atactggatg gcgggaccct   1980
118 acccacaggc aacaggcccg ggactcaggc cagtgcagac cacaggccgt ggctccacag   2040
119 agagggtggt cggaacaggc agggctatga gggaacagac tggtggctgc tggcatctgg   2100
120 gcggggaagg agctcgaggg aagcctggtg gtgctgggcc gtttccttat cttggtctgc   2160
121 tgtgtccaca gacagcacta tacaccctgg tggaatctca tggaactgca cacttacaat   2220
122 gggcaccttc tattgtatac aaattatact aagtaaaact gattaagcaa aaaaaaaaat   2280
123 gcttcacctt ggctctcggg accatgtgtg gattctctca gcaaaggcac taacagagaa   2340
124 cccagaacgt gtgagcccta gctcgggagc agtctgcccc gggcagaact gggggggcttc   2400
125 aaggggttgc gggcttctgg tcccccttcc ctcgtgccac ccaccgcgtc tacaggcctg   2460
126 gtctccctag ccctaac                                                   2477
128 <210> SEQ ID NO: 3
129 <211> LENGTH: 3685
130 <212> TYPE: DNA
131 <213> ORGANISM: Homo Sapiens
133 <400> SEQUENCE: 3
135 caagcctcct tccccggcgc acaggcacgc agccacaggc caagctgcga cgcgagctcc    60
136 gcgcgcggga tctccgcaaa aggtccgccc gatgcgttgg gcgggaatcg agcccgggtc-   120
137 aactgcttgg aaggcaacta tgctcaccac tataccacca acgccgcacg gcgcgggcag    180
138 ccccgccgcg ccggcccggg gctcccacca gcgcgccgcc gacgcccggg gcaggccggc    240
139 cccgacgccc ggtccgtccg cccgcccgca gctccgcgct gccgcggcct ctccaaaggc    300
140 cgccccgcgc cccaccggtg caaggccagc gcggctgacc cgttacgccc gcctgcctct    360
141 ggggcgctc tcgctcactc gccgcctcgg gcccccagag cccttcccca acaggtgccc    420
142 gggggggaaa cggccggcgc cggcagggtc cccactccta cgcttccac cgggcgcagg    480
143 gccccgtgtg tcgcagaaag cctcttccga caaccacttt gagccggcag ctcgttgggc    540
144 gccgtgcagg gccagaggag gcctcccggc tgccgctacc aagccgcgga cgagaagaaa    600
145 agacaggagg ccaaggaggc ccagaaggcc aaagggccag gcaggccagg cccgagatgg    660
146 caccctgcga ctagctggag ggcggaggaa ggagaaggag ggcccacagg ctgggtccga    720
147 ggcggcggcc caaaaagcac ggctgcctcc ccgtcgggga atcgaacccc ggtctcccgc    780
148 gtgacaggcg gggatactca ccactatact aacgaggacg acggcgacgg tcgccgggac    840
149 gccagacccc actccgaccg cggacgccta gccctgcctt gatcccctcc cccgacggca    900
150 ggggccgggc gcgtgctcgc cttccacccg ccgccgccg cccgccaccc gccacacgcc    960
151 acccgtcacc tgccacccgc cccccgccac cgttggcacg acctaccccg acacccaaca   1020
152 aagcaccctg cgatcccgct gggaccccgga gccggagccg gaccccgaca ggtaccggag   1080
153 cggcgtggaa cctccccgcg cgccctgcct gctgtctcca acgcggggat cgcgccgggg   1140
154 caggaggagg cgcgggcgaa acagtcaggc cgctgctcct aggacgcggt gggcgcacgc   1200
155 cctgcggggt tcggcgagcg gaggcgcggg ggctggggcg tgcgccggcg gcggccggcc   1260
156 cgacgcggac cctttgggtc cggggtgggg acgcggggc gtccacgcca acgccagccg    1320
157 gctccgttca cttggcgccc gctccccccg cgcggtccgt cggttgcgca ccgaacccag   1380
158 acaggcgccg gccaagggcg caggcgttcg cgccgggtcc cagccatgcc agcggcgaag   1440
159 cgccccggcg cgccgtcagg atggccgagc ggtctaaggc gctgcgttca ggtcgcagtc   1500
160 tcccctggag gcgtgggttc gaatcccact cctgacaagc cgacctttg gcccgcccgc    1560
```

```
161 cggagggcaa cgcccatggc aaccctggag cacctttggc cgcttcctgc cttgagccct      1620
162 tgcccgctct ccagactcca gcccccttga agcaagcctc caaaacgccg ccgcttctca      1680
163 ggcacgtccg ttcttcctgc ccacccgccg gctgtcgcag aaacagccca ggaccatgcg      1740
164 ccagcgcccg cgaccctcta ccaattgccc ttcggacaga cgccctcccc accacctcac      1800
165 acgccctctt ccctggcccc acacacagcg agcgaccgcg accaccttcc acgctcttcc      1860
166 ctgcctatct cctccgcccg ccttctcctc actcgcccaa acagacacag cccagattct      1920
167 tcccctattc ctccttttcc ctccttcctc ccaccggcct ccgcccaccg cccaccgcct      1980
168 tgaatcgccg ctgcgctgcc cagaggcgtc ctggcctgaa cagcccgccc ggtttcaccc      2040
169 tccaacttct gaccgctgag cagcagcgag cgactcgctc gtggagccgc acacacgtct      2100
170 cccaccagag gcacgccatc caacatcctg tcctttcctc cgacccctcg gaccccggcc      2160
171 gcgcattcca ttctgccgac accctagcca ggtcgccgat cccacctcgc tacctgtgct      2220
172 cccttcccgc taacacctgc ctgccggccc acctgcagcc cggacgcctg ccggccagag      2280
173 gcagcgggaa ccctgcacac agccgggcag gcgagtccaa acccggaaag acagcccaag      2340
174 aggaatcacg agcggaagcc ctagatcccc gtcacccgcc cacaaacgcc tggccccgcc      2400
175 gggaccagct ctgcgccaca gcgcatcccc acgcgggaag ccgcggcctg ggccgtccca      2460
176 gccacaccca gcgcgccttc tccagggtca gccagctgcg gctctgccga agcgctcctc      2520
177 cgctcctttc tcgcgctcca gcctccctac cagcccaggg ggccggaccc caagtgcgag      2580
178 ccggtggcgt gggtcagagc gcaggagcga ggcgcccacg gacctggtct gcgtttctga      2640
179 gccgcacgcc acggctgcga gacccgttcc ccatcgccgc ccccgctcgc tgacacaccc      2700
180 atcccgcctc tcacctgctg gtgacacaag tgagaaggct ggccccacgg tggtgaaaaa      2760
181 aaaaaacacc acacgaaaga aagaaagaaa gaaagaaaga aagaaagaaa gaaagaaaga      2820
182 aagaaagaaa gacagaaaga aacaacaaaa acaaaacaca aaaactctgg gtctgtgccg      2880
183 gggatccgcg ctcagcaagg cccgccacag caaatctgcc cacacgggca ttcgggcgcg      2940
184 ggccacggcc ggtccttccc ctggagaccc cggcgggcag tctctcgacc ctgggcggca      3000
185 gagaaagcgc aagatgggac gagtcggcct ctctccctcc gctctccctc cgcgccccgc      3060
186 ctcaggtccc tcgacgtgac gagagcctcc ccttctgctc gccccatcgg gccagcctct      3120
187 cgtggacgct gcaataggac ggaggcccac ggcaggcggt gaccagtgaa cggcggctgg      3180
188 tggcgagttc cgctgtgcca gcttccgttg gcgtttgcca tcggtgcatg ggtggttcag      3240
189 tggtagaatt ctcgcctgcc acgcgggagg cccgggttcg attcccggcc catgcagcac      3300
190 gccctcccat tttggtgctg cagcagcacc aaggcgtagc tgcgctcgcc tctgccgcct      3360
191 ccttacactc ggggcgcgcg agcgagtccg gcaccggctg cgctcccacg cgcgacggcc      3420
192 ctctgccctt tcttccgtgc ctctctcgac tgacttaggg atgagcctac cccccgcacc      3480
193 cacacacctt ggtgacaaca accccctccag acacgagagc gcgccagaca ccagaacttg      3540
194 gcagcctcct ggtcctgttt ctcttcattg ccctgccacc gcctctgccc gacgcatttc      3600
195 acttcacgga acaccgccag gcaccacggg cttgcagcca ctcgcaccac cccttctctt      3660
196 cacatttcac cgcctcgcct ctctc                                           3685
198 <210> SEQ ID NO: 4
199 <211> LENGTH: 2407
200 <212> TYPE: DNA
201 <213> ORGANISM: Homo Sapiens
203 <400> SEQUENCE: 4
205 taaggtctgg gtattctcag gcagcaggga caaggtgggc ttttttcctg gttgctaaac        60
206 ccacgtcaaa gtcgagctca gggactggag ctcaagaaac ccaccgccca ttctccagtc       120
207 cgaccgggga cctgcatgca cctctgccgt gctgccctga gtcctccaat cctccacact       180
208 cttcctctgt tatgtacacg tctccaccca ggcctgcaaa agtcccagct tcctccaggg       240
209 gcagggaccc gcacgccggc ccagggcttg gcacgcgggg atgctgaaac agggccaggc       300
210 ctggtttcca gccgatcgtc agagtcccaa ggcccagcaa ccttcctcac aaaggcctcg       360
211 ttaagaggcg aggaaacaag agccgggaga ggggcgcgga acggcgggcg ggacgaacga       420
212 ccagctccgc gcctccggcc agctgcgtcg agccaggggc accgcggctg ttgtgcggct       480
```

```
213 ggaaatctag gaatgggaag gttcggggcc tgctcggctc cggaggcagc tggcgggtcg   540
214 tccctggcgg cgttggagcg gtcagtggca gccgggcacg ggcgaccggg tcgcccgggt   600
215 cgccctcaga .ccgtgactcc cgaaaaacct tgcgggcggg gcgcgcccgc gccgtctctt   660
216 gccggaaggt gcgagttagt gcgctcgatt gtgggcgggg gcggaaagag gcgcgtttta   720
217 aagtggtaac agatggtttt cttatccaat aggattaaaa aatttgtcct tacccggccg   780
218 accgcggaag tagagtaggc gggcggccaa tggggacatg atggggggcg gagccgaggc   840
219 ctccgaagcg gaagtgggtt gctgttgagg cggcggcatc tttctcgagg agctctcctg   900
220 ggcggctgaa gaaggagctt cttctccgga gtgcgccggc ggtggcgcct gcggacctaa   960
221 ctagctccag gttaggccga gctttgcggg aaagcagcgg taagtcaggg ccttgcagat  1020
222 gcgaggttta ggcagcttcg cggcctacag aggcctcggc ccgcgcctct tgggggagcc  1080
223 gcgctgcgcg gcttgaccca gccgaggctt tgcagcccgg gacctcgagc cagctctggt  1140
224 cgctcgcact gccgtccgcg cgggcgcacc gagcccggct tggcgcgggc aacagaagtt  1200
225 aggaggtctg cgtctgggtc tcggctcacc ctgggggggcc gcggccatgg ggcttagttc  1260
226 ctagcctagg aagggaaact gagactctgg gaggggcagg aacgccccca aggtcacttg  1320
227 gaaagtcggg caggatgtgc tgttaggggg aagacccggg cagggttttt gttccccgct  1380
228 gacgacgcct cctttgtgtg ttcgcgccgc cgccccgcca tcgtggggcc tgcgagtttg  1440
229 ccggggtgcg tgggccgcgt ggcggggcct tttgtaggtc gggaggatct gagtacgggt  1500
230 gcgggcctga ccgtgggggc gccgaggtcg cagtctaaaa cttagtaggg cctcgatttc  1560
231 cgggcgcgct tccgggcccc ggctggtggt tggtggaacg tgcgactgtg aggcttgcgg  1620
232 cccagccctg caccgctcgg gcccttcacc gctctggcgc gcctatagac aggtgtatga  1680
233 agattctcac gacccgaaac agagttgcta gtaaacaccg cttttccgcc tttgatccat  1740
234 cggggaagag ggaaaaggat agagcttggg caagccgttt tggtagggat ttcagctttt  1800
235 gtctttcact tgtcagttcc catagacgtt cacaaactta ataatcttcg ttctgtttct  1860
236 gcaccaagtt cttgagccag acgtagggtc tcagctctgg agcctggctt agactgtcca  1920
237 actgactggg gagactgagg tccagaaaag tgaagtggtc tgcccaaggt cacatagcca  1980
238 gctatttggc agcagatgag gttaagtcct acctgcaaga tttgggtttt gaattcattg  2040
239 accaggagtt ttgggaccac tgtcaataaa agagacattg aagggaatct tttgttactt  2100
240 tcttggtgat ttgctttta atggacaagg acatattggg ttcagtttta tctgtgagtt  2160
241 tgaggtgaaa tagaggcatt cgagtagcaa gatatattgc tggctttgt attgcctgaa  2220
242 tttgagcttc caaaaatctt actttaacac atcgtttatt gatctttct tgaattacta  2280
243 cctttgtaag gacctttgt aaacattgtt tttctaatct tcatgaaatc ttaatgccat  2340
244 acgtaaacta tttctttta tataatgtat gcacatctgt gctttgtaca taaaatgagt  2400
245 aagattt                                                            2407
247 <210> SEQ ID NO: 5
248 <211> LENGTH: 2229
249 <212> TYPE: DNA
250 <213> ORGANISM: Homo Sapiens
252 <400> SEQUENCE: 5
254 tctttcctcg gcgctggctg gtgcgggttg gggtcaggtg gagaagccgc tctttgttaa    60
255 ggtgacagaa cgtgctgggg gtgggggccg gggccagggc cggtgcaact aggggggccgc  120
256 tgcccttttcc tggacacagt ggaagcttct tccgcatcac caaatttttg tcatccttc   180
257 tgagggacct gcttccaggc agcacgcaag ttgttgtccc gggtttactc cgcacccctc  240
258 tactgggtga ggaaggagca tcttgaatgg agatgggggt gtccccggtt tatacatctg  300
259 cagagaagag gtgtgccggg ctgcacctct ggaggccgcg gtaactgata ttagagaaga  360
260 ccccggttgc agctgggaag gctcactggc tggaaagagg tgcctcctcc ttccagcaaa  420
261 gggccctgtt tggaagggct gcttctcacc tgtctagtgg caccacagga cggtcggctt  480
262 ccactcgaat tccccggac ggtatcatca catagccggg tcctcgcagt gttggtttcc   540
263 caatccgatg actgtcacct cggtgaggac ctgtgctgat ggccggagaa ccctgcgctg  600
264 cgggcgcaca tggccaggtg gcgcctggca ggcgacgtcc gggtgcagga cggcgctctt  660
```

```
<210> 674

<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223>

<400> 674

gtatgtagtt gtgtgtt
```

needs explanation on ∠2237 line. Give source of genetic material (see item 11 on Error Summary Sheet)

17

```
<210> 675
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223>
```
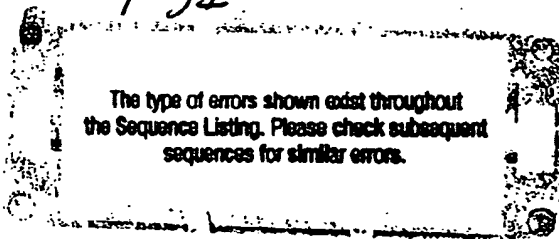
same error

```
<400> 675

tttgagtatt cgtaggaa
```

The above sequences are samples of global errors

18

FYI

> The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

```
<210> 1160
<211> 22
<212> DNA
<213> Artificial Sequence
```

<220> (bisulfite treated)

(handwritten) <220> NEVER has a response. It is a "header" only. Move this response to <223> line

```
<223> nucleic acid for analysis of methylation status of SEQ ID NO: 41
<400> 1160
GAGATTGGAG TTTAATTTTG GA                                              22
```

(handwritten) change these letters to lower-case. All nucleotide sequences need to show lower-case letters for the nucleotides

(handwritten) The above is a sample of global error.

_9_

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/09/2006
PATENT APPLICATION: US/10/562,383   TIME: 11:39:51

Input Set : N:\DA\PTO.DA.txt
Output Set: N:\CRF4\01092006\J562383.raw

FYI

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the
<220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:51; N Pos. 2126,2128,2131,2132
Seq#:404; N Pos. 2126,2128,2131,2132
Seq#:405; N Pos. 113,114,117,119
Seq#:520; N Pos. 2126,2128,2131,2132
Seq#:521; N Pos. 113,114,117,119

file://C:\CRF4\Outhold\VsrJ562383.htm   1/9/2006